

II B.Tech I Semester (R18) Regular Examinations November 2019
DATA BASE MANAGEMENT SYSTEMS

Time: 3 Hrs

Max. Marks.70

PART –A

(Compulsory Question, 10 x 2 = 20M)

- 1 a Define DBMS.
- b What is meant by primary key?
- c What is a PROJECT operation?
- d Define nested query?
- e What is Normalization?
- f Define MVD.
- g What is concurrency?
- h List any two recovery techniques.
- i Define transaction?
- j Define Linear Hashing.

PART –B

(Answer all questions, each carry 10M)

- 2 Explain about Database System Architecture
- OR**
- 3 Draw an ER diagram for Banking Database Example?
 - 4 Discuss the various Types of Joins with example
- OR**
- 5 Consider the following relational schema Employee (Empno, Name, Office, Age) Books (ISBN, Title, Author, Publisher) Loan (Empno, ISBN, Date) Write the following queries in SQL.
 - a) Find the names of the employees who have borrowed a book published by Pearson
 - b) Find the names of the employees who have borrowed all books published by Pearson
 - c) Find the names of employees who have borrowed more than five different books published by Pearson.
 - 6 Explain 1NF, 2NF, 3NF and BCNF with example?
- OR**
- 7 Discuss Fourth and Fifth Normal forms in detail.
 - 8 Briefly Explain ACID properties in detail
- OR**
- 9 Explain Timestamp Based protocol and Log Based recovery.
 - 10 Explain file organization technique with example?
- OR**
- 11 Explain ISAM technique with an example.